



Hyde County Emergency Services Department  
Division of Code Enforcement  
30 Oyster Creek Road  
Post Office Box 95  
Swan Quarter, N. C. 27885  
Office—252-926-4372 Fax—252-926-3701

### Modular Building Owners

**To permit Applicant: Please check the appropriate line, provide the requested information, and sign and date below.**

**I propose to setup properly labeled modular building at: \_\_\_\_\_**

\_\_\_\_\_ **I am a North Carolina licensed general contractor. My license number is \_\_\_\_\_.**

\_\_\_\_\_ **I am not a North Carolina licensed general contractor. I am providing the local inspection jurisdiction a \$5000.00 surety bond in accordance with N.C.G.S. 143-139.1.**

\_\_\_\_\_ **I am the owner of the proposed modular building. It is my intention to act as my own general contractor for setting up the proposed building, and I understand that problems which may arise due to set-up the propose building, such as inaccurate or insufficient foundation, improper or inadequate marriage line connections, improper plumbing, mechanical, or electrical connections between the units, etc., will be solely my responsibility, and I will be left with no recourse and must assume total liability for correction of the problems. I personally have thorough knowledge of the requirements of the NC State Building Code with regard to setting up modular buildings.**

\_\_\_\_\_  
**Signature of Permit Applicant**

\_\_\_\_\_  
**Date**

# Hyde County Emergency Services Department

[REDACTED], PO Box 95  
Swan Quarter NC 27885  
[REDACTED]



[REDACTED]  
252-926-4372-Office  
252-926-3701-Fax

## Manufactured Home Set-Up Checklist

- 1) Obtain septic tank permit from Environmental Health Specialist located at 1151 Main Street, Swan Quarter, NC (252) 926-4380.
- 2) Obtain building permit application from Inspection Department. Complete and return for review and issuance of permit.
- 3) Manufactured home must have a **ZONE III** Label in order to be located in Hyde County. If manufactured home is **older than July 13, 1994** it is allowed to be a **ZONE II** and still be located in Hyde County.
- 4) Virtually all of Hyde County is located in a Special Flood Hazard Area. This means that the home **must be set-up according to FEMA specifications**:
  - a) A registered land surveyor will need to establish a benchmark on your property. Return a copy of this with your permit application.
  - b) Ductwork and **ALL** mechanical/ electrical must be set up above BFE
  - c) Land surveyor must return and certify finished floor and ductwork is above BFE
  - d) Submit copy of elevation certificate by surveyor to this office ASAP
- 5) FEMA set-up requires a footing inspection prior to pouring concrete.
- 6) Please have the following completed before calling for an inspection of the home:
  - a) Footings and anchors according to FEMA instructions, manufacturer's set-up instructions or NC State Code for Manufactured Homes.
  - b) Sewer must be connected to septic tank or community sewer system. Be sure not to glue black and white pipe together. BE sure to install a cleanout. **DO NOT** install sanitary tees on their back. Increase sewer to 4"; a maximum of 10" from building.
  - c) Water Line Connection.... You will need to install a Shut-Off Valve in the ¾" line before it enters the floor of the home. You will also need a vacuum breaker on hose bibs.
  - d) Steps....You need at least 2 sets of steps a exterior doors. Steps need to be a minimum 36" wide; Treads need to be 10 ¼" deep with a maximum rise of 8 ¼". Rise of steps should be uniform within 3/8". If the door threshold exceeds 30" above grade, handrails are required on both sides of steps.
  - e) **Electrical**.....Inspection will extend from meter base through disconnect and into home. To avoid a re-inspection fee, **please be sure that door is unlocked**. We will also check ALL outside circuits and water pump circuit if applicable.
  - f) **Mechanical**.....Any HAVC equipment installed outside of home must be elevated above BFE (Same applies for water pump).



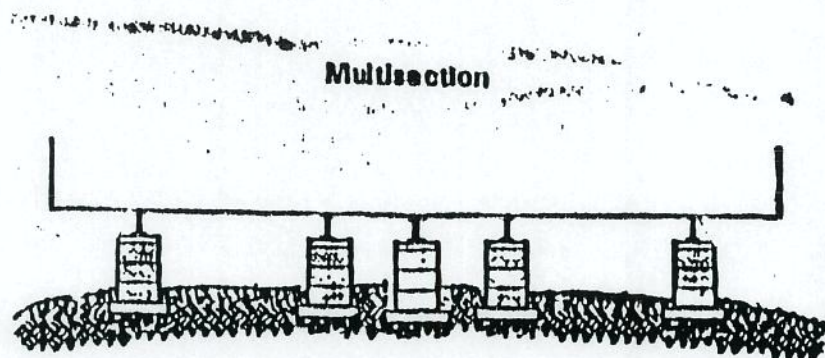
### Modular Home Checklist

- 1) Obtain Septic Tank Permit from Environmental Health Specialist located at the Hyde County Health Department, (252) 926-4380.
- 2) Obtain Building Permit Application from the Inspections Department. Complete and return for review and issuance of permit. Completed application should consist of:
  - a. A Registered Land Surveyor will need to establish a benchmark on your property. Return a copy of this with your permit application.
  - b. A Surety Bond of \$5000 or a valid NC General Contractor's License
  - c. Certificate of Subterranean Termite Treatment
  - d. Manufacturer's set-up instructions if an On-Frame Modular
- 3) Please have the following completed prior to calling for an inspection:
  - a. Pier and curtain wall footings with rebar installed
  - b. Sewer must be connected to septic tank or community sewer system. Be sure NOT to glue black ABS pipe and white PVC pipe together. Be sure to install a cleanout outside the crawlspace and close to house. DO NOT install sanitary tees on their back. Increase to 4" pipe a maximum of 10' from building.
  - c. Water line connection....You are required to install a shut-off valve in 3/4" pipe within 3' of the access door or in a readily accessible valve box within 5' of the exterior foundation wall.
  - d. Steps....You need steps at each entrance to the home. Steps need to be a minimum of 36" wide; Treads need to be 10 1/4" deep with a maximum rise of 8 1/4". Rise of steps should be uniform within 3/8". Toe kicks are required on open risers. If door threshold exceeds 30" above grade, handrails are required on both sides of steps.
  - e. Electrical....Inspection will extend from the Meter Base through disconnect and into home. To avoid re-inspection fees, **Please be sure that door is unlocked.**
  - f. Mechanical....Any HVAC equipment installed outside of home must be elevated above BFE.

### **Drainage of Site**

Each site shall have a finished grade that will provide for drainage away from the home.

DO: Slope exterior grade away from home or provide other approved means to prohibit surface runoff from draining under the home. The area under the home shall be smooth and sloped such that any water that happens to get beneath the home can freely drain out from under the home. (See Figure Below).





## FEMA Setup Information

This is the information concerning the new FEMA drawing, which has been designed for flood hazard areas in North Carolina:

The eight large 36"x 36"x 12" footings with the double anchors are designed to hold the house down with winds over 130 MPH and support the home when the land floods.

- A. These anchors are to be 48" long and 8"x 3/8" rod is to be welded so it will be in the cement.
- B. A grid 6" on center of 3/8" steel is to be installed 3" from the bottom and 3" from the sides.
- C. The tow 4' anchors are to be installed so the pillar sits between them.
- D. These anchors are to have crisis-cross bands to the chasis on the opposite side regardless of the height at which the home is placed.
- E. The bands are to come from the top of the chasis unless specified differently by the manufacturer.
- F. The 36" slabs are to be a minimum of 10" in the ground.
- G. Homes that are 60' or less use 3 slabs on each side. All others are to have 4 slabs on each side.

All other pillars and anchors are installed according to the manufacturer's setup manual.

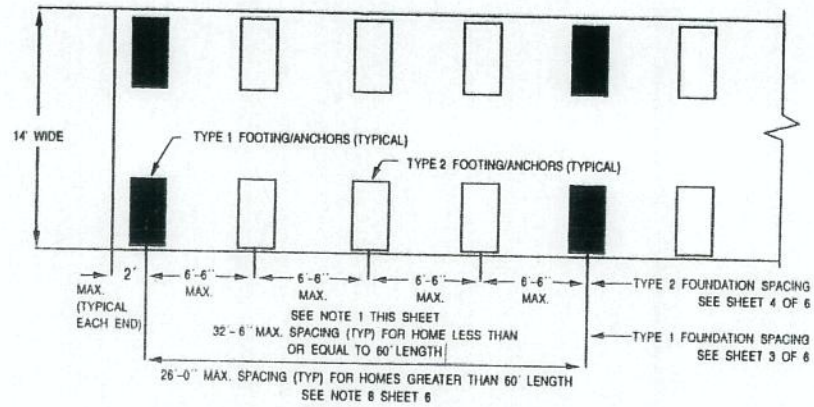
- A. Pillars may be set on 2 4"x 8"x 16" solid blocks which make a 16"x 16" base.
- B. Standard 30" double head anchors may be installed per set up manual.

Regular 8"x 8"x 16" blocks may be used on all set ups except when:

- A. The manufactured home is being installed on the Outer Banks area along the entire North Carolina coast or in any design wind zone with velocities exceeding 130 MPH.
- B. The manufactured home is being installed within 500 feet of the high mean water line of any bodies of water subject to rising or falling tides, both natural tides and man made deviations in water levels.
- C. The pre-manufactured home is being installed to height in excess of 48" from the lowest existing adjacent grade to the top of the chasis beam.

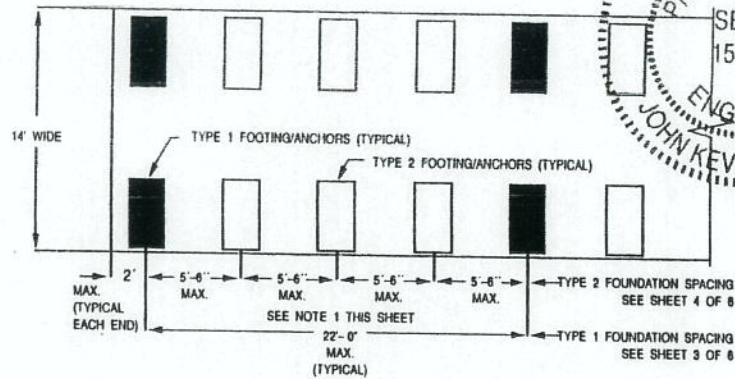
All anchors shall be 48" in areas A, B, C, in paragraph 3 (outer banks, 500 ft. of bodies of water subject to rising or falling tides, homes installed above 48" to top of chasis).

Should you have any question please call me at 252-926-4372.



### SINGLE WIDE FOOTING/ANCHOR SPACING - ZONE 2

NOT TO SCALE



### SINGLE WIDE FOOTING/ANCHOR SPACING - ZONE 3

NOT TO SCALE

#### NOTES:

1. FOUNDATION AND PIER LOCATION SHALL COINCIDE WITH THE LOCATIONS OF THE FACTORY APPLIED TIE-DOWN STRAPPING TO THE EXTENT THAT THE MAXIMUM DISTANCE BETWEEN PIERS SHALL NOT EXCEED THAT SHOWN ON THIS PLAN.
2. SEE SHEET 2 OF 6 FOR FOUNDATION REQUIREMENTS FOR DOUBLE WIDE UNITS.
3. PROVIDE ANCHOR & STRAPPING AT END WALLS TO COINCIDE WITH LOCATION OF LONGITUDINAL TIE DOWN STRAPS.

REVISED 12/5/95



AVOLIS ENGINEERING, P.A.  
P.O. BOX 13364 NEW BERN, NORTH CAROLINA 28561

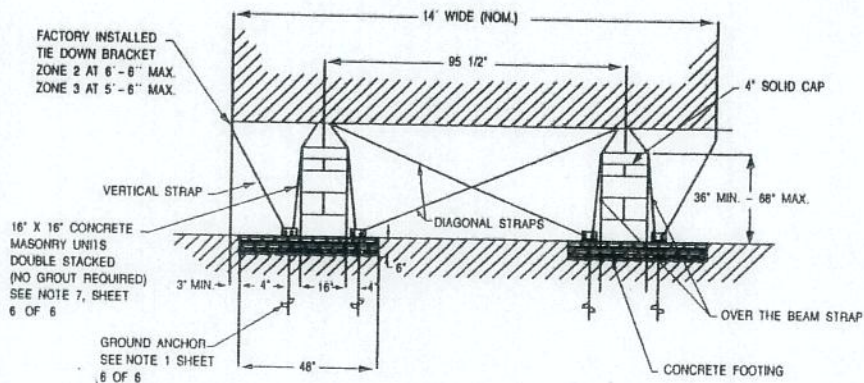
NORTH CAROLINA MANUFACTURED  
HOUSING INSTITUTE, INC.  
4911 DEPARTURE AVENUE  
RALEIGH, N.C. 27604

TITLE: FOOTING/ANCHOR SPACING ZONE 2 - ZONE 3  
SINGLE WIDE UNITS

BY: JKA  
DATE: 12/5/95

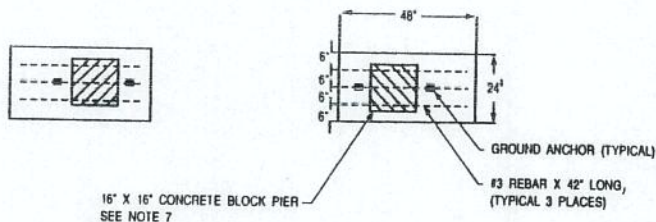
SHEET 1 OF 6





### TYPE 1 FOUNDATION - ELEVATION

NOT TO SCALE



STRAPS ARE NOT SHOWN  
FOR CLARITY

### TYPE 1 FOUNDATION - PLAN

NOT TO SCALE



REVISED 12/5/95



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P.O. BOX 13581 NEW BERN, NORTH CAROLINA 28561

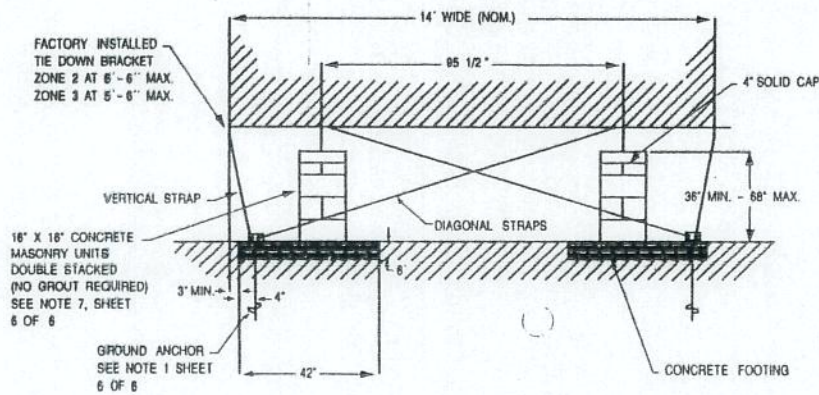
NORTH CAROLINA MANUFACTURED  
HOUSING INSTITUTE, INC.  
4911 DEPARTURE AVENUE  
RALEIGH, N.C. 27604

TITLE: FLOOD HAZARD AREA FOUNDATION  
TYPE 1 FOUNDATION

BY: JKA

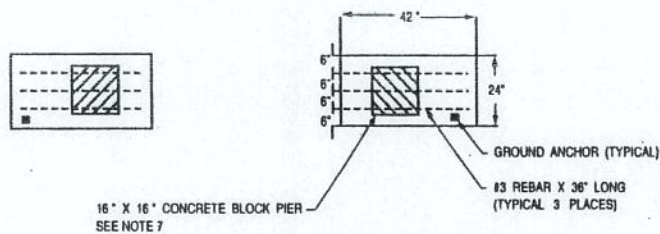
DATE: 12/5/95

SHEET 3 OF 6



TYPE 2 FOUNDATION - ELEVATION

NOT TO SCALE



■ STRAPS ARE NOT SHOWN FOR CLARITY

TYPE 2 FOUNDATION - PLAN

NOT TO SCALE



REVISED 12/5/95

**AE** AVOLIS ENGINEERING, P.A.  
P.O. BOX 15384 NEW BERN, NORTH CAROLINA 28561

NORTH CAROLINA MANUFACTURED  
HOUSING INSTITUTE, INC.  
4911 DEPARTURE AVENUE  
RALEIGH, N.C. 27604

TITLE: FLOOD HAZARD AREA FOUNDATION  
TYPE 2 FOUNDATION - SINGLE WIDE UNITS

BY: JKA  
DATE: 12/5/95

SHEET 4 OF 6



#### APPLICATION OF DESIGN:

THIS DESIGN WAS FORMULATED UTILIZING THE DESIGN CRITERIA SPECIFIED BELOW. IT SHALL BE THE RESPONSIBILITY OF ALL PERSONS UTILIZING THIS DESIGN TO ENSURE THAT ALL OF THE DESIGN CRITERIA ARE APPLICABLE FOR THE SITE ON WHICH THE MANUFACTURED HOME WILL BE INSTALLED. NON-FLOOD HAZARD AREAS AND/OR AREAS WITH A LOWER DESIGN WIND VELOCITY AS PRESCRIBED BY THE NORTH CAROLINA STATE BUILDING CODE, VOLUME I MAY UTILIZE THIS DESIGN TO INSTALL MANUFACTURED HOMES TO THE MAXIMUM HEIGHT SPECIFIED; HOWEVER, OTHER SPECIAL SITE CONDITIONS MAY EXIST ON THESE SITES WHICH WERE NOT CONSIDERED IN THIS DESIGN. THE USERS OF THIS DESIGN ARE RESPONSIBLE FOR ENSURING THAT ALL SUCH SITE SPECIFIC CONDITIONS ARE PROPERLY ADDRESSED.

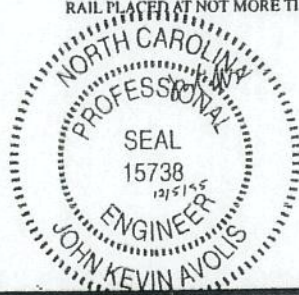
#### DESIGN CRITERIA:

MAXIMUM WIND VELOCITY: ZONE 2: 100 MPH  
ZONE 3: 110 MPH

ROOF LIVE LOAD..... 20 PSF  
FLOOR LIVE LOAD..... 40 PSF  
FLOOR DEAD LOAD..... 20 PSF  
MAXIMUM FLOOD VELOCITY..... 5 FPS  
MINIMUM SOIL BEARING CAPACITY..... 2000 PSF  
MAXIMUM EAVE WIDTH..... 12 INCHES

#### NOTES:

1. ALL GROUND ANCHORS SHALL DEVELOP A MINIMUM TOTAL WITHDRAWAL RESISTANCE OF 3150 POUNDS IN THE TYPE SOIL IN WHICH THEY WILL BE INSTALLED. THE INSTALLER SHALL VERIFY THAT THE ANCHORING SYSTEM PROPOSED MEETS OR EXCEEDS THE 3150 POUND CAPACITY IN THE SOIL TYPE IN WHICH IT IS BEING INSTALLED.
2. GALVANIZED STRAPPING SHALL BE 1/4" WIDE MIN. X 0.035" THICK MIN. HOT DIPPED GALVANIZED, MEETING THE REQUIREMENTS OF FEDERAL SPECIFICATION QQ-S-78111 FOR TYPE I, CLASS B, GRADE 1 STRAPPING. THE STRAPPING SHALL HAVE A MINIMUM TENSILE STRENGTH OF 4725 POUNDS.
3. SCREW ANCHOR CLAMPS, TENSIONING ADJUSTERS, AND OTHER ANCHOR HARDWARE SHALL NOT LIMIT THE OVERALL CAPACITY OF THE ANCHORING SYSTEM BELOW 4725 POUNDS PER ANCHOR.
4. FOUNDATION SKIRTING SHALL BE DESIGNED TO BREAKAWAY AT A MAXIMUM LATERAL FORCE OF 15 PSF. NO PERMANENT FOUNDATION SKIRTING IS ALLOWED UNDER THIS DESIGN.
5. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 psi @ 28 DAYS.
6. ALL REINFORCING STEEL SHALL BE MINIMUM GRADE 40.
7. FOR HOMES SET UP OVER 48 INCHES FROM NATURAL GRADE TO THE BOTTOM OF THE CHASSIS ON THE OUTER BANKS IN EXPOSURE "D" OR WITHIN 500 FEET OF ANY BODY OF WATER THAT IS INFLUENCED BY FLOODING OR IS SUBJECT TO WAVE ACTION, ALL MASONRY PIERS SHALL BE CONSTRUCTED OF 75% SOLID CONCRETE MASONRY UNITS AND SHALL UTILIZE MINIMUM 48-INCH ANCHORS ACHIEVING THE MINIMUM CAPACITIES SPECIFIED IN ITEM 1 ABOVE.
8. ALL HOMES 60 FEET IN LENGTH OR LESS SHALL HAVE A MINIMUM OF THREE (3) TYPE I FOUNDATIONS ON EACH SUPPORT RAIL SPACED NOT MORE THAN 32'-6" ON CENTERS. ALL HOMES GREATER THAN 60 FEET IN LENGTH SHALL HAVE A MINIMUM OF FOUR (4) TYPE I FOUNDATIONS ON EACH SUPPORT RAIL PLACED AT NOT MORE THAN 26'-0" ON CENTERS.



REVISED 12/5/95



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P.O. BOX 15584 NEW BERN, NORTH CAROLINA 28541

NORTH CAROLINA MANUFACTURED  
HOUSING INSTITUTE, INC.  
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RALEIGH, N.C. 27604

TITLE:

NOTES

BY: JKA

DATE: 12/5/95

SHEET 6 OF 6

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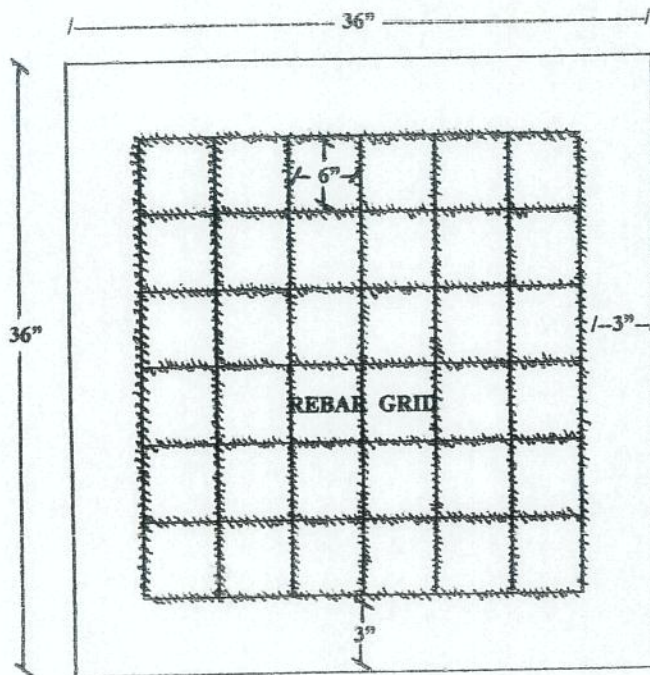


# HYDE COUNTY BUILDING INSPECTIONS

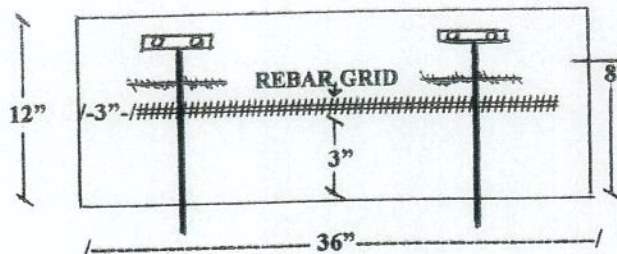


FEMA SET

TOP VIEW



RE-BAR GRID MUST BE SUSPENDED 3" ABOVE BOTTOM OF FOOTING BY USING RE-BAR CHAIRS AND 3' FROM ALL SIDES.



ANCHORS MUST BE 48" LONG AND HAVE A 4" FLANGE. AN 8" LONG PIECE OF REBAR MUST BE WELDED PERPENDICULAR TO ANCHOR SHAFT AND MUST BE ENCASED IN CONCRETE.